

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

NOVOZYMES A/S,

Plaintiff,

v.

GENENCOR INTERNATIONAL, INC., and
ENZYME DEVELOPMENT CORPORATION

Defendants.

C.A. No. 05-160-***

PLAINTIFF NOVOZYMES' POST-TRIAL REPLY BRIEF ON DAMAGES

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Abbreviations and Citations In This Document

Citations are to numbered pages of the trial record, presented as an Appendix for the liability and damages phases of the case. Line numbers are indicated by a colon, e.g. **A5017:5-9** means lines 5-9 of page **A5017**. “**TE**” indicates a trial exhibit. “**DI**” indicates Docket Index. Emphases in quotations are added unless otherwise indicated.

I. INTRODUCTION

The damage to Novozymes for Genencor's infringement comes to \$20,365,465 plus interest. **DI 207, 21**. This should be enhanced, i.e. trebled plus fees and costs, because the infringement was calculated and willful. **DI 207, 31-38**. Genencor objects (**DI 209**), urging that its unrestrained infringement should have no consequence (**DI 209**): the infringement should not be enjoined (**DI 209, 36-39**) and Novozymes should not recover anything (*Id.*, 9, 20, 29-34). At most Genencor would pay a nominal royalty, "if Novozymes is entitled to any royalty at all." *Id.*, 26. Thus, Genencor pleads for its infringement to be blessed as a good way of doing business.

This would be wrong. Novozymes should be compensated fully and fairly for its real and substantial losses. *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1544-45 (Fed. Cir. 1995). Genencor should be called to account for its acute disrespect of the '031 patent and Novozymes' rights. *Vulcan Eng'g Co. v. FATA Aluminum, Inc.*, 278 F.3d 1366, 1378 (Fed. Cir. 2002); *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 383 F.3d 1337, 1342 (Fed. Cir. 2004) (en banc). Genencor's infringement should be enjoined, so that past offense, irreparable harm, and future domineering can be appropriately barred and policed. *eBay Inc. v. MercExchange, L.L.C.*, 126 S. Ct. 1837, 1839 (2006); *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1247 (Fed. Cir. 1989).

II. ARGUMENT

Genencor cannot escape from lost profit damages, as an infringement windfall, because of Novozymes' corporate structure and use of the word "non-exclusive" in a single international tax document. There is no escape by pitting Novozymes A/S and NA against each other in a false "catch-22." See **DI 207, 24-30; DI 209, 2-9; §II(A) infra**. There is no escape by arguing that Novozymes sold Liquozyme under its '038 patent instead of the '031 patent. See **DI 207, 7-10; DI, 209, 13; §II(B) infra**. There is no escape in Spezyme Fred and Xtra. They are markedly inferior and have been superseded or came too late. See **DI 207, 11-15; DI 209, 11-20; §II(B) infra**. It is reasonable to estimate that all infringing Spezyme Ethyl sales would have gone to Liquozyme. It is reasonable for Liquozyme's price to hold steady annually, with one adjustment in two years. *Id.*

The plea for a low 8% royalty is also wrong. Genencor relies on two remote indicators: (1) an old license for a non-core technology that incrementally improved certain manufacturing methods; and (2) average royalties parsed from widely varying third-party data. In a hypothetical negotiation, 25% would be reasonable. *See* **DI 207, 22-24; DI 209, 22-27; §II(C) *infra***.

Genencor cannot escape its willful infringement either. It actively disregarded the '031 patent, made no real inquiry, and relied here on defenses it knew were wrong, or that it developed after-the-fact for this case. *See* **DI 207, 31-38; DI 209, 29-35; §II(D) *infra***. The request to get off scot-free is topped by opposing any injunction. The damage to Novozymes' market in its patented product is irreparable and should be enjoined. The public interest would not be harmed, and certainly would not be served, by permitting a predatory competitor to toy with infringement. *See* **DI 207, 38-39; DI 209, 36-39; §II(E) *infra***.

A. GENENCOR CANNOT EXCLUDE NOVOZYMES, NA FROM THIS CASE

Genencor argues that Novozymes cannot recover lost profits because it sold Liquozyme through its U.S. subsidiary (Novozymes, NA). **DI 209, 9-11**. This is a baseless diversion. A patentee's corporate structure is no *per se* barrier to lost profits. 35 U.S.C. § 284; *General Motors Corp. v. Devex Corp.*, 461 U.S. 648, 653 (1983); *Rite Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1544-45 (Fed. Cir. 1995) (en banc); *Kalman v. Berlyn Corp.*, 914 F.2d 1473, 1482 (Fed. Cir. 1990).

Congress has not imposed this barrier. It enacted a statute that requires courts to "award the claimant damages adequate to compensate for the infringement." 35 U.S.C. §284. The Supreme Court has not imposed this barrier. It cautions, "[w]hen Congress wished to limit an element of recovery in a patent infringement action, it said so explicitly." *General Motors*, 461 U.S. at 653. The Federal Circuit has imposed no barrier either. "[T]he language of the statute is expansive rather than limiting [and] affirmatively states that damages must be adequate, while providing only a lower limit *and no other limitation*." *Rite Hite*, 56 F.3d at 1544. When a patentee makes and sells a product in competition with the infringer, he can recover the full reasonable amount of his lost profit on sales that went to the infringer. *Id.*; *Kalman*, 914 F.2d at 1482 (awarding lost profits on sales by patentees' closely held company).

Only Genencor, the infringer, would keep hold of Novozymes' lost profits. It relies on a single inapposite case: *Poly-America, L.P. v. GSE Lining Tech., Inc.*, 383 F.3d 1303 (Fed. Cir. 2004). **DI 209, 10.** *Poly-America* narrowly cautioned against asserting the independence of two U.S. corporations in one forum, to gain advantage, while inconsistently denying that independence in another forum. 383 F.3d at 1311. Unlike the patentee in *Poly-America*, Novozymes A/S is not a U.S. company seeking to repudiate its independence under pretense, in order to claim the separate profits of a sister U.S. corporation. *Id.* Here, A/S is a Danish company that is claiming its own profits. These profits flow directly to A/S via Novozymes, NA, a wholly-owned and controlled subsidiary. **A15054:16-15056:20; A15163:24-15165:6.** NA's profits, assets and liabilities all belong to A/S, its ultimate parent. **A15011:3-8; A15160:25-15161:3; A15166:3-15167:12.** A/S is not asking this Court to disregard the Novozymes corporate structure, but rather to honor it.

Genencor also argues that profits cannot be recovered by joining NA as a co-plaintiff. **DI 209, 2-9.** It references one term in a Technology License Agreement (the "TLA"), which nominally gives NA "non-exclusive" rights to all A/S technology. *Id.* Genencor would make this a contract question with a blindly literal outcome. However, the joint role of NA and A/S in their unified alpha-amylase business is what matters. Their concerted activities support NA's standing as a co-plaintiff, and prove Novozymes' right to lost profit damages. *Rite Hite*, 56 F.3d at 1552.

The TLA does not reference or transfer any rights specific to the '031 patent. **TE-40, A16028-A16033; TE-240, A16028.** It was not intended to govern the relationship between A/S and NA over rights to the patent, and does not have that effect. **A15034:6-16.** It is a blanket agreement, giving NA threshold rights to all A/S technology. This includes non-core technology that Novozymes also conveyed to others, as well as core technology that is very closely held. Thus, a generic non-exclusive grant was proper. A superseding exclusive arrangement was not precluded, and is how the alpha-amylase patents and products were actually treated. **A15029:3-A15030:11.**

The TLA apportions Novozymes' taxes between NA in the U.S. and A/S in Denmark, as decided by tax authorities in both countries. **A15026:16-15027:5; A15035:8-24; A15074:10-15075:13; A15076:8-19; A15167:13-15169:7.** There is no evidence that Novozymes engineered a

“cake and eat it” strategy like *Poly-America*, in order to get inconsistent advantages in different forums. A/S and NA act in concert on tax issues, as one entity, just as they do in the alpha-amylase business. The TLA cannot bar Novozymes NA from this lawsuit. It also cannot keep Novozymes A/S from recovering lost profits, whether or not NA is a party.¹

Furthermore, the arrangement between a patentee and its licensee, if A/S and NA stand in those shoes, is not determined by semantics. Courts look for an “express or implied promise” by the patentee to the licensee “that others shall be excluded from practicing the invention within that territory.” *Rite Hite*, 56 F.3d at 1552. *See also Textile Productions, Inc. v. Mead Corp.*, 134 F.3d 1481, 1484 (Fed. Cir. 1998); *Ortho Pharmaceutical Corp. v. Genetics Inst.*, 52 F.3d 1026, 1032 (Fed. Cir. 1995) (co-plaintiff standing depends on the facts, “not simply that the word ‘exclusive’ may or may not appear in the license.”). *Kalman*, 914 F.2d at 1481-82, is directly on point:

When the sole licensee, however, has been shown to be directly damaged by an infringer in a two supplier market, and when the nexus between the sole licensee and the patentee is so clearly defined as here, the sole licensee must be recognized as the real party in interest. Furthermore, in determining that [the sole licensee] has standing to join as a co-plaintiff, we not only give effect to principles of equity, but also the Congressional mandate that, in patent actions, “upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement. . . .” 35 U.S.C. § 284 (1982).

Genencor dismisses this mandate and presses for the bald “non-exclusive” label in the TLA. **DI 209, 4-6.** It admits that “courts have considered non-contract facts and circumstances,” but argues “they have done so only when there is no written agreement between these parties . . . or when the written agreement is silent or ambiguous.” **DI 209, 4-5.** However, the cases do not proceed in this way. When present, an agreement is part of the evidence. Actual day-to-day conduct controls. *Kalman*, 914 F.2d at 1481-82; *Textile*, 134 F.3d at 1484; *Ortho*, 52 F.3d at 1032. Indeed, Genencor is contradicted by its own cases, e.g.: “The use of the word ‘exclusive’ is not controlling; what

¹ The tax formula tracks product sales by NA and A/S. A set rate is applied to all technologies in all businesses as a convenient, i.e. a blended rate, decided by the U.S. and Denmark authorities. **A15074:17-15076:19.** The rights and conduct for each patent in each technology and business are not dealt with and are not meant to be. The TLA does not by any means separate Novozymes from its profits nor from its ability to collect its losses from an infringer. *Id.*

matters is the substance of the arrangement.” *Depuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, Nos. 05-1311, 05-1335, 2006 U.S. App. LEXIS 28673 at *46 (Fed. Cir. Nov. 20, 2006).²

Additionally, Genencor purports to distinguish *Kalman* and *WMS Gaming Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1361 (Fed. Cir. 1999). In *WMS*, the infringers “stipulated to an exclusive license relationship,” which did not happen here. 184 F.3d at 1361; **DI 209, 9**. Still, *WMS* explained that “if the district court had granted [the infringer’s] motion to withdraw its stipulation, it would have been obligated to give [the patentee] the opportunity to join the subsidiary.” 184 F.3d at 1361. The actual relationship still superintends. *Kalman* is said to have three distinctions: (1) no written agreement; (2) the licensee practiced the patent in suit; and (3) the licensee was formed to manufacture and sell the patented product. **DI 209, 8-9**. These points are irrelevant. First, the TLA is marginal, remote and ambiguous in this context; it cannot trump all other considerations. Second, Novozymes is in the same shoes as the patentee in *Kalman*, because it makes and sells Liquozyme under the twin ‘038 patent. *Ortho*, 52 F.3d at 1031-32; *Ricoh Co. v. Nashua Corp.*, 947 F. Supp. 21, 24 (D.N.H. 1996); **DI 207, 1-3**. Third, NA was formed to manufacture and sell products for Novozymes in the U.S., including the patented alpha-amylase, and has done so. **A15031:1-5**.

Novozymes A/S can collect lost profits in its own right, and also as co-plaintiff with NA.

B. GENENCOR CANNOT AVOID LOST PROFIT DAMAGES BY PRAISING INFERIOR AND UNAVAILABLE PRODUCTS, MAKING TEST SALES OF SPEZYME XTRA, AND OFFERING SPURIOUS DAMAGE CALCULATIONS

After years of intense rivalry, Genencor defends its infringement and contests damages by making an astonishing claim: “Novozymes does not compete with Genencor.” **DI 209, 11**. As seen at trial, there could be no clearer case of fierce competition in this two-supplier alpha-amylase market. There could be no clearer case that Novozymes is one unified entity, comprising its Danish (A/S) and U.S. (NA) counterparts. This one Novozymes body, with two hands, exploits the Novozymes alpha-amylase patents and sells covered products in this country. **DI 207, 24-29**;

² At most, the TLA is ambiguous in the present context and cannot *per se* govern the outcome. The course of conduct must be considered anyway, even under Genencor’s theory.

A15008:23-15022:17. Genencor's name-game artificially pits A/S against NA and cannot bar lost profits. Alternatively, Genencor argues that lost profits are precluded because Novozymes' sales of Liquozyme should not count; it disagrees with Novozymes' profit margin; and its Fred and Xtra products are acceptable alternatives. **DI 209, 12.**³

Liquozyme is a patented Novozymes product and qualifies for lost profits. No other product was an available and acceptable non-infringing substitute. Furthermore, Novozymes' profit margin is substantiated. Second guessing by Genencor does not excuse it from paying damages.

1. Novozymes Can Rely on Sales of Liquozyme For Its Lost Profits

Genencor argues that its customers would not turn to an alpha-amylase of the '031 patent, because Novozymes says it "would have recaptured the SPEZYME[®] Ethyl sales with Liquozyme; which does not practice the '031 patent." **DI 209, 13.** This is a fruitless diversion. The '031 and '038 patents form an umbrella, under which Novozymes sells a patented alpha-amylase (Liquozyme), which qualifies for lost profits. Liquozyme is claimed in U.S. Patent No. 6,297,038. **TE-392, A16188-229; A15284:13-16.** Spezyme Ethyl falls under the '031 claims. **A10066; TE-100, A7040.** Both have the same properties and advantages, including high thermostability and low calcium dependence. **TE-392, A16195 at 3:62-4:6; TE-100, A7009 at 3:65-4:9; A10005, ¶3, 6-8.** The specifications of both patents are the same, although the claims were issued separately. Novozymes is practicing what it disclosed and patented. **DI 207, 7-8.** It was absolutely foreseeable that a sale of Spezyme Ethyl would most likely be a lost sale of Liquozyme, as Genencor intended. **TE-230, A16018; A15019:15021:24; A15102:5-15107:2; A15123:23-15126:22; A15236:1-15243:6; A15248:12-15252:2.** Genencor cannot succeed by infringement yet avoid paying damages – especially when its target is covered by a twin-sister Novozymes patent. *Rite-Hite*, 56 F.3d at 1546-47; *Grain Processing Corp. v. American Maize-Products Co.*, 185 F.3d 1341, 1354 (Fed. Cir. 1999) (explaining *Rite-Hite*; patentee's other patent excluded competing products).

³ Genencor previously relied on G995/997, Ultra-Thin from Valley Research, and feared enzymes from China. **A15448:15-15450:17.** These "alternatives" are not briefed and are therefore abandoned.

2. Genencor's Old And Inferior Products Are Not Acceptable Alternatives

Genencor contends that its Spezyme Fred family (Fred, Fred L and HPA) provides acceptable non-infringing alternatives to the '031 patent and Spezyme Ethyl. Customers would allegedly turn back from Ethyl to these old products and not to Liquozyme. **DI 209, 13.**

Wishful thinking doesn't make it so. Customers demand the superior properties of the patented Spezyme Ethyl and Liquozyme enzymes. **A15089:14-15090:18; A15093:24-15101:17; A15107:3-15109:24; DI 207, 2-3, 8-11.** They abandoned Fred in droves and paid more for Liquozyme. **A15093:24-15095:11; A15100:2-15102:1; A15096:13-15098:25; A15112:12-15113:6.**⁴ This created a new market for high-performance alpha-amylases, leaving only a handful of plants with Fred. **A15100:23-15102:1; A15246:2-15247:5.** When Spezyme Ethyl appeared it took half the market from Liquozyme with equivalent properties and a lower price. **A15103:4-13; A15240:13-15241:20; TE-485, A16630; A15195:9-12; TE-230, A16019.** Customers who upgraded have not returned to Fred. It was "virtually eliminated" in favor of Liquozyme (**A15111:15-22**) and then it was "Liquozyme and Ethyl" (**A15110:14-25**). If customers can't buy Ethyl, they will look for equivalent performance in Liquozyme, not obsolete Fred. **A15103:4-13; A15181:3-15187:13, A15193:19-15195:8, A15203:3-10; A15246:8-22; A15256:14-21.**

Genencor does not actually dispute any of this. Its main thrust is that customers have not all instantly switched to Liquozyme (**DI 209, 11**), although some have already done so. **A15424:12-15425:8.** The decision to pull Ethyl was made on or about August 25, 2006 (**A14502**), just six weeks before the October 10-12, 2006 trial. In this brief period, many customers were well-supplied and had no need to buy alpha-amylase. **A15428:6-18.** Most sales are made under bulk supply contracts, predominantly with large buying groups. **A15425:22-15426:25.** There is no evidence that such contracts were up for bid in this short period or that any converted to Genencor's

⁴ Contrary to Genencor, **DI 209, 14 n. 9**, Novozymes has shown that customers demand the advantages of the patented products; and Genencor agrees. **A15183:12-15184:4; A15187:6-13; TE228, A16004; TE230, A16018, 16022.** Thus, *Standard Havens Prods., Inc. v. Genecor Indus., Inc.* 953 F.2d 1360, 1373 (Fed. Cir. 1991) was not overstated in the main brief. **DI 207, 11.**

“alternatives.” **A15427:12-15**. Moreover, Novozymes need not negate every chance that a customer might not buy Liquozyme. *Kaufman Co. v. Lantech, Inc.*, 926 F.2d 1136, 1141 (Fed. Cir. 1991).⁵

The brief period after the announced exit of Spezyme Ethyl is not proof of any market trend or customer consensus, and does not show that Fred is an acceptable substitute. On the contrary, these products don’t make the grade, customers are not buying them, and Genencor admits they are not competitive. **A15181:3-15187:13; A15193:19-15195:8; A15203:3-10; TE-230, A16018; A15186:7-15187:3; TE-230, A16018; A5037:15-5039:11**. To be an “acceptable” alternative one product must be recognized as an equivalent technical replacement and viable economic substitute for the other. This is not so here. *See Standard Havens*, 953 F.2d at 1373.

3. Xtra Was Not Acceptable and Not Available (Too Little Too Late)

Like Fred, Xtra is an admittedly inferior product. **A15203:13-16; A15350:22-15351:17; TE-298, A16068**. It does not have the high-performance alpha-amylase properties which are absolutely in demand. *Id.*; **TE-447, A16232; A15203:20-15204:15; A15247:6-15248:16**. It is also more costly, and customers will have to indulge Genencor by working around these deficiencies. *Id.* Genencor does not really think they will. **A15195:22-2; A15197:5-16; TE-447, A16232**. Xtra has not taken hold, if it ever will. *Micro Chemical, Inc. v. Lextron, Inc.* 318 F.3d 1119, 1123 (Fed. Cir. 2003). It certainly has not been accepted *already* as Genencor argues. **DI 209, 16**.

According to Genencor’s Mr. Beto, 12 of 29 Spezyme Ethyl customers made a non-Ethyl purchase from Genencor. Nine are trying Xtra and three are trying Fred. **A55422:20-19**.⁶ Another 10 bought an unspecified Genencor product to try later. **A15432:20-15424:21**. Genencor says these

⁵ Genencor obfuscates by claiming “Novozymes’ expert admitted that what was shown in the highlighting [of TE-775] was ‘substitution’ of Genencor’s other products for SPEZYME® Ethyl.” **DI 209, 15 n. 11. TE-775** highlights initial sales of Xtra in Q3 of 2006 (dark red triangles), corresponding to the highlighted legend “Spezyme Xtra.” All the alpha-amylases were on an overall upward trend (though Fred much less), because the market is growing. **TE-485, A16630**. Ms. Davis noted that Fred and Xtra went up a bit, but this was *not* “substitution” of an *accepted* alternative. She explained that a few customers were experimenting: “[T]hey’re showing they would at least try those products first.” **A15309:19-22**. Genencor’s citation omits this key testimony.

⁶ Only three customers even wanted to try Fred; it can’t be an acceptable substitute. *Micro Chem.*, 318 F.3d at 1122; *Grain Processing*, 185 F.3d at 1343. Xtra is too late and can’t qualify either. *Id.*

are not trials, and lumps them together in a new “demonstrative exhibit” (not of record), to say that 22 of 29 customers (75%) have switched. In fact, these transactions occurred outside of and apart from Genencor’s customer supply contracts, which is typically how alpha-amylases are sold. **A15113:7-15116:3**. As Beto explained, “the customer is committed by contract to purchase a given quantity of their requirements from Genencor.” **A15426:13-15**. The import of his testimony is that customers can also make additional purchases. **A15426:19-15427:4**. So far, no customer has entered into a supply agreement for an alleged Genencor alternative. According to Beto, no one has made a contractual obligation to purchase Xtra; nor is there evidence of any such switch to Fred. **A15427:12-18**. At most, the evidence shows an initial one-time willingness by customers to indulge Genencor, and give their post-Ethyl product a chance. **A15309:19-22**. This does not show acceptance of a non-infringing alternative at the time the infringement began.⁷

Genencor says that Xtra was attainable earlier but was held back because Spezyme Ethyl is more profitable. It therefore preferred to gamble on this lawsuit. **DI 209, 18**. There are serious problems with this. For one, this was not really why Xtra was held back. For another, an infringer cannot escape damages by intentionally withholding the non-infringing alternative.

Xtra was held back because Genencor didn’t think of it; and then knew it wasn’t good enough. It was a last-ditch hedge for this lawsuit and Genencor despised it. **TE-447, A16232; TE-298, A16068**. Xtra was conceived in June 2005, three months *after* infringement began. **A15194:9-25; TE-383, A16624**. It took about a year to develop and make the first test sale. **A15201:1-9; A15248:9-11**. This is too long, involved and uncertain to be an obvious retrospective alternative. It cannot be retroactively “available” and nullify Novozymes’ lost profits under *Grain Processing*, 185 F.3d at 1343-44. *See also Micro Chem.*, 318 F.3d at 1123; *Cordis Corp. v. Boston Sci. Corp.*, Civ No. 03-027-SLR, 2005 U.S. Dist. LEXIS 10749, *6 (D. Del. June 3, 2005); *Honeywell Int’l, Inc. v. Hamilton Sunstrand Corp.*, 166 F. Supp. 2d 1008, 1030 (D. Del. 2001).

⁷ Genencor says that Ms. Davis did not account for post-Ethyl customer behavior. **DI 209, 15**. However, she explained that Genencor extrapolated all-important conclusions from post-Ethyl data that is minimal, uncertain, premature, and inadequate. **A15247:6-15248:11**.

Here, Genencor claims to have purposely withheld an acceptable non-infringing alternative. **DI 209, 18.** If true, it could have avoided or mitigated the predictable damage it intentionally inflicted on Novozymes. It chose not to do so, admittedly so that it could make a higher profit at Novozymes' expense. Novozymes can recover these foreseeable losses. *Rite-Hite*, 56 F.3d at 1545-46; *Micro Chem.*, 318 F.3d at 1125-26.

At most, Genencor says that, for many years, it had the *Bacillus* strain from which Xtra is made and the resources to experiment. **DI, 209, 17-18.**⁸ Despite claiming to have these materials and tools, *Genencor did not know what to do with them*. It tried unsuccessfully to come up with a non-infringing alternative, including attempts to alter and improve Fred. **A5031:24-5032:11.** It did not come up with Xtra until very late. **A15247:6-15248:11.** The development was not trivial. Trial and error was needed, and testing. Xtra was not an instant switch-over product. **A15402:21-15403:2; A15403:11-15405:12.** It was not "available" or "acceptable" because it was not foreseeable, and cannot subtract from the otherwise foreseeable lost profits from Genencor's infringement. *Micro Chem.*, 318 F.3d at 1123; *Grain Processing*, 185 F.3d at 1343.

4. Novozymes Has Established Lost Profits With Reasonable Probability

Genencor argues there should be no lost profits because Novozymes estimated a full recapture of Spezyme Ethyl sales by Liquozyme (a one-to-one substitution), at a flat annual price for each year of infringing sales in the accounting period (zero price erosion). **DI 209, 20-21.**⁹

A one-to-one recapture rate is supported by the record, it is reasonable and Genencor has not shown otherwise. Ms. Davis based her calculations on concrete information and applied well-accepted economic principles and market analyses to reach a fair result. **A15232:15-15233:18.** The cases are clear. A patentee need not show that every sale really would be recaptured. Any

⁸ The products before Xtra were made by EBS. Genencor bought EBS in 2002, at least in part to get its alpha-amylases. **A15090:19-15091:24; A15371:10-15372:21; A15377:15-15378:17.**

⁹ The possibility of different results, e.g. a 100% or 83% recapture rate, does not mean that the infringer benefits. The patentee is entitled to the highest amount it reasonably substantiates. This serves the statutory mandate for full compensation. *Rite-Hite*, 56 F.3d at 1544-55; *General Motors Corp. v. Devex Corp.*, 461 U.S. 648, 654 (1983); *Kaufman*, 926 F.2d at 1141 (calculatory doubt is resolved against the infringer).

reasonable and objective method can be used to model the market, including models applied under the *Panduit* and two-supplier tests. *Micro Chemical*, 318 F.3d at 1122; *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1156 (6th Cir. 1978); *Golden Blount, Inc. v. Robert H. Peterson Co.*, 438 F.3d 1354, 1371-72 (Fed. Cir. 2006); *Rite-Hite*, 56 F.3d at 1545; *Kaufman*, 926 F.2d at 1141. Certainty is not required; nor is it necessary to rule out other approaches and results an infringer might suggest. If the patentee shows a reasonable probability that his approach is sound, he is entitled to recover. *Id.*

It is completely reasonable to expect that, without competition from Spezyme Ethyl, the price of a premium product like Liquozyme would remain steady for one year and drop modestly for the next year, without loss of customers. **A15535:16-15537:15; TE-492A, A16646**. Alpha-amylase is needed for fuel ethanol production, demand was up, and optimized manufacturing was desired. *Id.* Customers in this market would not switch to less efficient and more expensive products, which also require significant processing changes. *Id.* About half the market was paying a higher price for Liquozyme than Spezyme Ethyl during the accounting period. Customers who could no longer get Genencor's infringement discount would reasonably buy the same amount of Liquozyme to furnish their needs, at the same price other customers were paying. *Id.* Hand-waving by Genencor that price erosion theoretically is never exactly zero cannot change anything. Here, the Liquozyme profit margin and prices of record comprise a fair and reasonable approximation of "but for" market conditions, especially over the limited time period and price swing at issue. *Id.*

Novozymes has calculated its lost profits to a reasonable probability and should recover from Genencor. **DI 207, 21.**

C. GENENCOR CANNOT AVOID A REASONABLE ROYALTY

Novozymes is entitled to a reasonable royalty for infringing sales that are not subject to lost profits. *Crystal Semiconductor Corp. v. Tritech Microelects. Int'l, Inc.*, 246 F.3d 1336, 1354 (Fed. Cir. 2001). Novozymes has shown that it can recover lost profits for all infringing sales in the primary fuel ethanol market. **DI 207, 7-19.** But if any sales escape, 25% is a reasonable royalty because the patented invention is revolutionary and its value is very high. Customers in this market

demand the high performance properties of the patented alpha-amylases and pay a lot more for them. **DI 207, 19, 22-24; A10024, 58-59; A15094:1-15102:20; A15236:5-24; A15181:3-15182:22; A15292:4-19; A15286:25-15287:21.** In secondary markets the sales are less robust and royalty indicia are reduced. The rate would be lower, and 8% is reasonable. *Id.* Genencor argues for 8% in all circumstances. It says Novozymes ignored a tangential 8% license, cannot prove 25% “to a reasonable certainty,” and cannot explain why two markets should have two royalties. **DI 209, 22.** These contentions are plainly mistaken.

Genencor challenges 25%, based on one license in a very different field. **DI 209, 22, 26-28.** That license cannot be parlayed from distant background technology into a litmus test for alpha-amylase royalties in the fuel ethanol industry. In 1995, Genencor granted Novozymes certain rights to use Filamentous Fungi as host cells in a process for making proteins. The royalty there was set at 5-8%, as an estimate of the market for that incremental technology at that time. **TE-339, A16120, A16125; A15319:16-22; A15325:9-25.** The 1995 license was not for a specially valuable high-performance product with an established following. It was not a core technology in a rapidly expanding market. **A15280:5-15281:19.** Ms. Davis explained that the 1995 license was helpful only for estimating a reasonable royalty of 8% in the secondary alpha-amylase market, where the value-added is significant but not foremost. **A15287:17-15288:22.** It was not helpful for the primary market, where the cardinal features of the patented product are prized, indeed indispensable. *Id.*

No other licenses point the way. Dr. Teece sifted his third-party data for preferred rates. He focused on broad industry averages and adjudicated (*not* negotiated) rates in various disparate fields. He did so without regard for the nature of any of the know-how concerned or its significance in the field. He did so without explaining why his selected averages should apply. **DI 209, 27-28.** For example, the data behind his averages includes royalties as low as 0% and as high as 50% in the biotechnology field alone. **A15485:8-15493:3; A15516:21-15517:5; TE-771, A16862.** He only heeded the “overall industry average” (**DI 209, 28**), but the appropriate royalty is often substantially higher (**A15516:21-15517:5**). This is one such case, as the record amply shows. There is no

established industry rate for this technology or for these products in this market, and they certainly are not average. **A15278:3-15281:19; A15319:16-15322:7.**¹⁰

A fair royalty can be determined from a hypothetical negotiation between reasonable parties at the time infringement began. Well-accepted market factors contribute to this approach. *Rite Hite*, 56 F.3d at 1554; *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970), *aff'd*, 446 F.2d 295 (2d Cir. 1971). Two accepted ways to marshal these factors and develop a reasonable royalty are known as the “analytical method” and the “rule of thumb.” These are not last-resort guesswork; they are tried and true. *See, e.g., Honeywell Int’l, Inc. v. Universal Avionics Sys. Corp.*, 426 F. Supp. 2d 211, 216-17, 225-26 (D. Del. 2006) (affirming jury award of reasonable royalty based on Ms. Davis’ analysis, including rule of thumb). Ms. Davis diligently employed these economic models in light of the *Georgia-Pacific* factors.¹¹

The “rule of thumb” provides a royalty that will give the licensee of a patented invention about 75% of the profit while the licensor will get 25%. **A15289:22-15290:8.** This rule has been widely used to approximate a fair rate of return. **A15329:23-15331:22.** Genencor does not object to the rule *per se*; only to Novozymes’ calculations. According to Genencor, Ms. Davis counted all of Genencor’s sales, when she should have “incrementally” subtracted the non-infringing alternatives. **DI 209, 24.** But Genencor’s other products serve different customers with different needs. Fred was superseded and has survived only as a legacy. Xtra is a below-par, non-thermostable and calcium-

¹⁰ This is not surprising. It is consistent with Novozymes’ practice of not out-licensing core technology. **A15016:1-15017:13; A15281:20-15282:13; A15320:8-22; A15353:1-25.** There is likewise no evidence that Genencor licensed such core technology either. **A15278:3-15281:19; A15319:16-15322:7.** There are no other licenses to look for in this two-supplier market. Licenses which settled litigation are of little help. They reflect duress, not an arms-length negotiation between competitors. **A15320:14-22.** *Fromson v. Western Litho Plate & Supply Co.*, 853 F.2d 1568, 1574 (Fed. Cir. 1988); *Panduit*, 575 F.2d at 1164 n.11 (royalties arising in settlement “should not be considered evidence of an ‘established’ royalty” for determining a reasonable royalty because they may be “strongly influenced by a desire to avoid full litigation”).

¹¹ Ms. Davis did not ignore the licensing landscape. She considered all of Genencor’s information and found it inadequate. **A15319:14-15322:18.** Where Genencor would begin and end with the extraneous licenses, and one in particular, Ms. Davis explained that this was only a start. **A15287:17-15288:20.** The licenses alone cannot answer the bottom line question. Thus, a reasoned economic approach is needed, and Ms. Davis applied two of them. **A15292:1-15293:2.**

dependent enzyme like Fred, and was not around or even conceived when the infringement began. They are not real alternatives and do not figure in this calculation. See **DI 207, 11-15; §II(B) *supra***. The value of the patented invention is not diluted by Genencor's other products.

The analytical method in turn assumes that a reasonable royalty will account for the difference between the higher profit margin on the patented product and the lower profit margin on the next-best alternative or benchmark, at the time infringement began. **A15291:15-15292:19**. Ms. Davis showed that these calculations are consistent with the rule of thumb, and also lead to a reasonable royalty of 25%. **A15292:20-15293:2; TE-490; TE-491**. Genencor again has no real quarrel with this method or its fitness in this case. It complains that the calculated royalty should be reduced by using Spezyme Xtra as the benchmark, or by using a different time period to calculate the profit margin for benchmark Fred. **DI 209, 26**.

Xtra cannot be the right benchmark for familiar reasons. It was not yet conceived or on sale when the infringement began; no price had been set; no data was available to establish a profit margin; etc. The first sale was on or about June 2006 and only a few sales have been made since. **A15194:12-15195:8; A15239:7-15242:19; TE-485, A16630**. Later meager data cannot be applied with hindsight to a hypothetical March 2005 negotiation. Xtra could not have influenced the reasonable royalty for the '031 patented products. **A15283:3-15**. *Hanson v. Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1081 (Fed. Cir. 1983) (reasonable royalty not determined through "hindsight evaluation of what actually happened, but on the basis of what the parties to the hypothetical license negotiations would have considered at the time of the negotiations" when infringement began).¹²

Ms. Davis also explained that the appropriate profit margins to consider would be the on-going margins for the patented and benchmark products, i.e. after development and start-up costs. Also, an apples-to-apples comparison requires the same conditions, preferably without these costs. The parties to a royalty negotiation would be interested in the future and long-term profits after

¹² Genencor purports to subsume the *Georgia-Pacific* factors in a hypothetical negotiation without addressing them. **DI 209, 26 n. 21**. Novozymes and Ms. Davis thoroughly evaluated and briefed how these factors support the 25% royalty. **DI 207, 22; A15266:20-289:21**.

start-up and would plan accordingly. **A15290:12-15291:14; TE-490**. By looking carefully at the data, Ms. Davis found that a six-month comparison answers these concerns. *Id.* The analysis relied upon by Novozymes is entirely fair and proper. The reasonable royalty is 25%.

D. GENENCOR CANNOT AVOID THE CONSEQUENCES OF ITS WILLFUL DISREGARD FOR THE NOVOZYMES '031 PATENT

Novozymes has chronicled the numerous facts that show Genencor's complete failure to discharge its "affirmative duty to exercise due care" and avoid infringement. **DI 207, 31-39**. See *Knorr-Bremse*, 383 F.3d at 1343. Genencor does not dispute this evidence. Instead it offers unsupported platitudes about subjective good faith. To do so, Genencor reasons from cart to horse. For example, it is true there is no "universal rule" that an accused infringer discontinue sales during litigation. *Gustafson, Inc. v. Intersystems Industrial Products, Inc.*, 897 F.2d 508, 510-11 (Fed. Cir. 1990). **DI 209, 33**. However, "a party may continue" only if it is "[e]xercising due care," to reach "what in good faith it believes to be a legitimate defense." *Id.* Genencor never did so.

Instead, Genencor reasons inconsequentially from cases where the infringer had no knowledge of the asserted patents until the lawsuit was filed. See *Gustafson*, 897 F.2d at 510-11 (party cannot willfully infringe a patent of which it had no knowledge); *Nickson Indus., Inc. v. Rol Mfg. Co.*, 847 F.2d 795, 799-800 (Fed. Cir. 1988); *State Indus., Inc. v. A.O. Smith Corp.*, 751 F.2d 1226, 1234 (Fed. Cir. 1985) (defendant was unaware of patent "until the commencement of this suit"). Unlike these cases, Genencor concedes that it had notice of the allowed patent claims *more than five months* before Novozymes filed suit. **DI 194, A14502, ¶A**. It had ample opportunity to investigate, but took no steps to avoid infringement. Courts find willfulness in such circumstances. *Advanced Cardiovascular Sys., Inc. v. Medtronic, Inc.*, 265 F.3d 1294, 1310 (Fed. Cir. 2001); *National Presto Indus., Inc. v. West Bend Co.*, 76 F.3d 1185, 1193 (Fed. Cir. 1996). *Gustafson* also noted this distinction. It cited numerous opinions that *affirmed* willfulness when the defendant was aware of a pending patent, took no action, and was sued when the patent issued. 897 F.2d at 510.

Furthermore, there is extensive affirmative evidence of willful infringement:

1. Genencor intended the EBS-1 product to compete with Novozymes, but was forced to withdraw because EBS-1 infringed the Novozymes '038 Patent. **TE-230, A16022;**

A15184:22-15186:6. This left it without a competitive product and years behind schedule.

2. Genencor then began on EBS-2 (a/k/a Spezyme Ethyl) as the company's "only viable short term option" against Novozymes. **TE-230, A16018.**
3. According to Dr. Crabb, Genencor knew about the pending '031 patent before it launched Spezyme Ethyl, and realized that it would likely infringe if the patent issued. Genencor gambled on a mistaken assumption that the patent would be rejected. **TE-228, A16005-06; TE-320, A16076; A15210:8-15212:13.**
4. When the PTO issued a Notice of Allowance in September 2004, Novozymes sent a copy of the allowed patent claims to Genencor and encouraged it to take appropriate steps to avoid infringement. **TE-320, A16074; DI 194, A14502, ¶A.**
5. Crabb admitted that the deletions in Spezyme Ethyl "corresponded" to those claimed in the pending (and later issued) '031 patent. **TE-228, A16006; A15383:3-15384:10.**
6. The '031 application and prosecution was publicly available. **A15219:13-15221:23.** Genencor made no investigation that would support a good-faith belief of non-infringement or invalidity, either before or after the Notice Allowance, the grant of the patent, or once the lawsuit was filed. **A15217:1-9.**
7. At most, Crabb had a vague and uninformed belief that the claims were unpatentable over the Suzuki reference. **A15210:8-15212:10.** However, the PTO *expressly considered* Suzuki and concluded that the claims were *not obvious* in view of unexpected results in the Borchert Declaration. **A10017-10021.** Neither Crabb nor anyone else considered these facts or took any other steps to exercise due care. **A15222:16-23; A15224:7-15.**
8. Genencor knew that Suzuki was not a reliable basis for invalidity. In its own patent application, it contemporaneously represented that the identical '031 and Spezyme Ethyl variants are patentable over Suzuki. **TE-202, A8532.14-8532.15; A6538:24-6540:7.**
9. Genencor deliberately delayed introducing Spezyme Xtra. It elected to stay the course, in order to preserve its customer base and prevent "an estimated loss of about \$9.8 million." **DI 209, 18; A15203:11-15205:13; A15195:22-15197:22; TE-447, A16232.** It discontinued Spezyme Ethyl only after the Court found infringement. **A14502, ¶C.**
10. Genencor knew that it was competing with Novozymes in a two-supplier market. It specifically recognized and intended that its sales would come directly at Novozymes' expense and would cause price erosion in the marketplace. **TE-230, A16016, 16018-19.**

These facts are more than sufficient to establish "culpable behavior" and willful infringement. *Golden Blount*, 438 F.3d at 1368 (threshold evidence shifts burden to defendant).

Genencor responds with hollow assurances of good faith. Its entire defense is pinned on Dr. Crabb. However, there was no testimony that he or anyone else diligently investigated the patent, or

even made the attempt. The only excuse was that Crabb at one time thought the “Suzuki deletion” was an obstacle, and that Genencor *ipso facto* would not knowingly infringe a patent. Crabb conceded that he was not knowledgeable in patent law, and that he “did not do anything” after Genencor received notice of the allowed claims. **A15222:16-23**. There is no evidence he communicated his views to Genencor management at the time. He did not know what anyone else might have done, and he did not know of any Genencor policy in responding to allegations of infringement. **A15217:25-15218:7; A15221:2-15223:2-15**. He eluded to secret advice of counsel, which the Court properly rejected. **A15378:18-15381:23, A15386:19-15388:25, A15391:10-15392:16**. Genencor cannot finesse by suggesting that advice may exist, yet refuse to reveal it as privileged. *In re Echostar Communs. Corp.*, 448 F.3d 1294, 1301 (Fed. Cir. 2006) (“inequitable” to permit selective waiver of privilege as both sword and shield); *L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1126-27 (Fed. Cir. 1993) (withheld opinion not presumed favorable).¹³

This hardly supports a “sound reason” for believing that a patent is invalid, “and would be so held if litigated.” *SRI Int’l, Inc. v. Advanced Technology Labs., Inc.*, 127 F.3d 1462, 1464-65 (Fed. Cir. 1997). To the contrary, such vacuous and self-serving beliefs are entitled to no weight. *Golden Blount*, 438 F.3d at 1365-70; *Rosemount, Inc. v. Beckman Instruments, Inc.*, 727 F.2d 1540, 1547-48 (Fed. Cir. 1984).¹⁴

¹³ Genencor similarly implies that it relied on an *irrelevant* opinion concerning a *different* patent (‘038), while asserting privilege for any opinion on the ‘031 patent itself. **DI 209, 31**. The ‘038 opinion has “no logical connection” with infringement or validity of the ‘031 claims. **A15210:4-15219:12**. See *Advanced Cardiovascular Sys., Inc. v. Medtronic, Inc.*, 265 F.3d 1294, 1309 (Fed. Cir. 2001); *Underwater Devs., Inc. v. Morrison-Knudsen Co.*, 717 F.2d 1380, 1390 (Fed. Cir. 1983) (although opinion “may be considered legal advice, it was not legal advice upon which the appellant was justified in relying”). This Court rejected a bait and switch approach to privilege, i.e. producing an irrelevant opinion while withholding a relevant one. **A15386:19-15388:25**.

¹⁴ Genencor cites cases to say it can rely on an employee with “technical expertise” without need for an attorney. However, in each case, the defendant made studious efforts to investigate the patent and avoid infringement. *Union Carbide Chem. & Plastics Tech. Corp. v. Shell Oil Co.*, 425 F.3d 1366, 1380 (Fed. Cir. 2005) (in-house “chemical engineer and licensed patent attorney” carefully reviewed claims); *Biotec Biologische Naturverpackungen GmbH v. Biocorp, Inc.*, 249 F.3d 1341, 1355-56 (Fed. Cir. 2001) (“world-renowned expert” advised defendant it did not infringe); *Rolls-Royce Ltd. v. GTE Valeron Corp.*, 860 F.2d 1101, 1109 (Fed. Cir. 1986) (bona fide
(continued...))

Even if Crabb initially believed the claims were invalid, Genencor had no basis for clinging to this belief. The PTO considered Suzuki and concluded it was overcome by compelling scientific evidence. Genencor did not consider this evidence; it did not conduct any inquiry or experiment to test it. Reliance on an argument previously considered and rejected by the PTO is not a good faith defense. *Acoustical Design, Inc. v. Control Electronics Co.*, 932 F.2d 939, 942 (Fed. Cir. 1991).¹⁵

Genencor knew that it infringed; its excuses are specious; and it took no action to respect Novozymes' rights. It continued in order to reap maximum possible gain from Novozymes. **DI 209, 18**. Its litigation defenses do not pass for a good-faith investigation at the proper time, nor can it use them as an end-run around its assertions of privilege. *Crystal Semiconductor Corp. v. Tritech Microelects. Int'l, Inc.*, 246 F.3d 1336, 1352 (Fed. Cir. 2001).¹⁶

This was not a close case. Genencor's baseless claim construction flouted the "unambiguous" instructions in the patent. **A10032-37, ¶13-16, 27-30, 36**. It had "no credible argument" to rebut the unexpected results that overcame the closest prior art. **A10048, ¶66; see also A10051, ¶70; A20054, ¶76; A10055, ¶78-80**. The assertions of inequitable conduct ignored Novozymes' "reasonable explanations" and that the "killer" Machius references actually was of "marginal materiality." **A10061-62, ¶99-10; A10063-64, ¶105-106**. For all the sound and fury, Genencor's arguments were revealed as make-weight at trial. Enhanced damages should be awarded. *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 827 (Fed. Cir. 1992).

Attorneys fees are awarded upon a finding of willful infringement, absent reasons to the contrary. *Johnson & Son, Inc. v. Carter-Wallace, Inc.*, 781 F.2d 198, 200 (Fed. Cir. 1986). An award of fees is particularly appropriate in these circumstances, where Genencor provoked

(...continued)

efforts to design around the patent). Genencor did no such thing. It left everything to Crabb, who did not have the tools he needed to make an informed inquiry and he did not even try.

¹⁵ Novozymes did not "redo" experiments for trial. **DI 209, 32 n.22**. New data addressed Genencor's litigation defense that the original work was intentionally biased. **A6537:1-6545:25**.

¹⁶ Genencor relies on inapposite cases where the judge thought the jury went too far, e.g., *Brooktree Corp. v. Advanced Micro Devs., Inc.*, 977 F.2d 1555, 1581 (Fed. Cir. 1992).

expensive litigation rather than exercise due care or abate its infringement. The Court may also award fees independent of whether it enhances damages.

E. GENENCOR CANNOT AVOID A PERMANENT INJUNCTION

Genencor attempts to avoid an injunction by shifting the burden of proving irreparable harm to Novozymes. It does so by mischaracterizing the recent holding in *eBay*, 126 S. Ct. at 1839-40. **DI 209, 36-37.** The *eBay* holding was actually very simple (*id.*):

We hold only that the decision whether to grant or deny injunctive relief rests within the equitable discretion of the district courts, and that such discretion must be exercised consistent with traditional principles of equity, in patent disputes no less than in other cases governed by such standards.

The Court did not overrule the long line of cases that presume irreparable harm from patent infringement. This presumption can be rebutted, now as before, if the facts warrant. *See, e.g., Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1247 (Fed. Cir. 1989); *Polymer Tech. v. Birdwell*, 103 F.3d 970, 973 (Fed. Cir. 1996). Furthermore, the Federal Circuit has applied the presumption after *eBay*. *See Abbott Labs. v. Andrx Pharms., Inc.*, 452 F.3d 1331, 1348 (Fed. Cir. 2006).

Genencor argues that, since *eBay*, “patentees who do not exploit their own patents have been unable to show irreparable harm” in a district court. **DI 209, 37-38.** Factually, its cited cases are quite different. Three injunctions were denied when the patentee did not make or sell a competing product. *See, e.g., Paice LLC v. Toyota Motor Corp.*, No. 2:04-CV-211-DF, 2006 WL 2385139 at *5 (E.D. Tex. Aug. 16, 2006). Seven were granted when the patentee did sell a competing product. *See, e.g., Black & Decker Inc. v. Robert Bosch Tool Corp.*, No. 04 C 7955, 2006 WL 33446144 at *4 (N.D. Ill. Nov. 29, 2006). Loss of market share to the infringer is key proof of irreparable harm. *Black & Decker*, 2006 WL 33446144, at *4; *Litecubes, LLC v. Northern Light Prods.*, No. 4:04CV00485 ERW, 2006 U.S. Dist. LEXIS 60575 at *31-32 (E.D. Mo. Aug. 25, 2006).

Novozymes has suffered this irreparable harm. It’s Liquezyme product lost half the market to Genencor’s infringing Spezyme Ethyl. **DI 207, 5-6; §IIB *supra*.** Further, as in *3M Innovative Props Co. v. Avery Dennison Corp.*, 2006 U.S. Dist. LEXIS 70263 at *5 (D. Minn. Sept. 25, 2006):

Avery asserts that a damage award to 3M would fully compensate 3M, but the Court cannot agree. 3M has spent nearly five years litigating to protect its interest in this patent and has consistently refused to execute a licensing agreement with Avery. Having lost at trial, Avery wants to force 3M to grant a license that 3M refused to grant before trial. The Court will not disturb 3M's determination that its business interests will not be served by the licensing of this product. As such, the Court finds that 3M has suffered an irreparable injury and that monetary damages are inadequate to compensate for that injury.

Genencor also says that the Novozymes corporate structure precludes irreparable harm and an injunction. **DI 209, 37-38**. For all of the reasons given above and in the main brief, Novozymes is one entity, it fully exploits the '031 patent and was irreparably harmed by the infringement – whether or not the NA subsidiary is named as a party. **§IIA supra; DI 207, 24-30**.

In its last gasp, Genencor urges that competition by infringement should be permitted. It argues that “the public” would be harmed by an injunction, because a ban on infringement might allow the price of Liquozyme to go up, leading to higher prices for fuel ethanol. **DI 209, 40**.

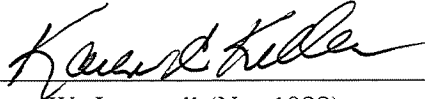
Alpha-amylase and fuel ethanol customers are not the public to which a balance of harm is addressed. They are players in a free market where competition is tempered by patent protection. *Smith Int'l v. Hughes Tool Co.*, 718 F.2d 1573, 1581 (Fed. Cir. 1983); *Rite-Hite*, 56 F.3d at 1547-48. There is no evidence that an incremental price adjustment for Liquozyme will effect fuel ethanol prices and constitute harm. It cannot be “harm” for a patentee to exclude competitors and set a market price; this is his statutory right. 35 U.S.C. §284; *Smith Int'l*, 718 F.2d at 1581. Genencor eroded the price by its infringement. It cannot cry “harm” that its unauthorized discount must end. *Id.*; **DI 209, 39-40**. Genencor is obliquely campaigning to “bring back Ethyl,” despite the infringement. How else could the “harm” from an injunction and presumed price increase be prevented? Genencor would take the denial of an injunction as a license to resume infringement. This would severely harm the public interest in protecting patented inventions. *Id.*

III. CONCLUSION

For all the reasons given, the relief requested by Novozymes should be granted. **DI 207, 40**.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Karen E. Keller, hereby certify that on December 18, 2006, I caused to be electronically filed a true and correct copy of the foregoing document with the Clerk of the Court using CM/ECF, which will send notification that such filing is available for viewing and downloading to the following counsel of record:

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